REMARKS

The present application was filed on October 20, 2003, with claims 1-20. Claims 1-20 remain pending. Claims 1 and 18-20 are the independent claims.

Claims 1-8, 11 and 14-20 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2002/0176357 (hereinafter "Lay").

Claims 9 and 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lay in view of U.S. Patent Publication No. 2005/0278503 (hereinafter "McDonnell").

Claims 12 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lay in view of U.S. Patent Publication No. 2002/0075540 (hereinafter "Munter").

In this response, Applicants respectfully traverse the §102(e) and §103(a) rejections. Applicants respectfully request reconsideration of the application in view of the remarks below.

With regard to the §102(e) rejection, Applicants respectfully note that MPEP §2131 specifies that a given claim is anticipated "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the "identical invention . . . in as complete detail as is contained in the . . . claim," citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants further note that the Federal Circuit has reiterated that "a patentee is free to act as his own lexicographer, and may set forth any special definitions of the claim terms in the patent specification or file history, either expressly or impliedly." *Schoenhaus v. Genesco, Inc.*, 440 F.3d 1354, 1358, 78 USPQ2d 1252, 1255 (Fed. Cir. 2006). Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings").

The present specification, at page 5, lines 13-15, defines a "link layer device" as a "processor which performs processing operations associated with a link layer of a network-based system." The present specification, at page 5, lines 19-21, further defines a "physical layer device" as "a device

which provides an interface between a link layer device and a physical transmission medium of a network-based system."

As the Examiner correctly indicates and as discussed in Lay at [0026] and [0027], FIG. 1A of Lay discloses a switch comprising a plurality of ports, e.g., 102(1)-102(12), each of which comprises a physical layer device (physical element PHY) and a link layer device (Media Access Controller MAC). However, Lay fails to teach or suggest the limitations of claim 1 wherein a flow control message is generated in the physical layer device and transmitted from the physical layer device to the link layer device.

In formulating the rejection of claim 1 in the present Office Action, the Examiner relies primarily on paragraph [0039] of Lay as disclosing the above limitations. This paragraph recites:

> [0039] Switch 100, in one example of the invention, has a Flow Control Manager 116 that manages the flow of packet data. As each port sends more and more data to the switch, Flow Control Manager 116 can monitor the amount of memory being used by each port 102(1)-102(12) of switch 100 and the switch as a whole. In this example, if one of the ports 102(1)-102(12) or the switch as a whole is using up too much memory as is predetermined by a register setting predefined by the manufacturer or by a user, Flow Control Manager 116 will issue commands over the ATM Bus requesting the port or switch to slow down and may eventually drop packets if necessary.

Paragraph [0039] teaches techniques wherein a Flow Control Manager within a switch issues commands either to that switch or to one of its ports. Flow Control Manager 116, as illustrated in FIG. 1A, clearly is not a physical layer device, as it does not provide an interface between a link layer device and a physical transmission medium of a network-based system.

Likewise, paragraph [0028], also cited by the Examiner, discloses:

> [0028] Flow control is provided by each of the MACs. When flow control is implemented, the flow of incoming data packets is managed or controlled to reduce the chances of system resources being exhausted. Although the present embodiment can be a non-blocking, wire speed switch, the memory space available may limit data transmission speeds. For example, during periods of packet flooding (i.e. packet broadcast storms), the available memory can be exhausted rather quickly. In order to enhance the operability of the switch in these types of situations, the present invention can implement two different types of flow control. In full-duplex mode, the present invention can, for example, implement the IEEE 802.3x flow control. In half-duplex mode, the present invention can implement a collision backpressure scheme.

Paragraph [0028] teaches that flow control, including a collision backpressure scheme, is provided by each of the MACs, which the Examiner correctly concedes is a link layer device, rather than a physical layer device.

In the present Office Action at page 8, third paragraph, the Examiner contends that the "Flow Control Manager could be located in either PHY or MAC." Applicants respectfully disagree. Lay teaches the Flow Control Manager is located in neither PHY nor MAC, but rather is physically connected to the ports via a bus. See, for example, Lay at [0051]-[0052] ("Each of the transmit (TX) and receive (RX) portions of ports 102(1)-102(12) are connected to the PBM Bus, ATM Bus, and TXM Bus for communications with other components of the switch. . . . [The Flow Control Manager 116 is] also connected to the ATM Bus for communications with other portions of the switch.")

In the present Office Action at page 7, last paragraph, the Examiner contends that "the ports are in the physical layer, and therefore the amount of memory being used by the ports, which is the flow control message, is generated in the physical layer." In formulating this argument, the Examiner appears to be arguing that Lay discloses a technique wherein the ports generate a message indicating the amount of memory being used by the ports which is then transmitted to the Flow Control Manager.

Applicants respectfully submit that Lay in fact expressly teaches away from such a technique by instead disclosing a technique in which the Flow Control Manager monitors the ATM Bus and counts RECEP_COMPL commands and FREE commands in order to determine the amount of memory being used by the ports. See Lay at, for example, [0074]-[0078]. RECEP_COMPL commands are generated by an Address Manager; see Lay at [0061] ("AM 122 sends a RECPE_COMPL command over the ATM Bus signifying that packet reception is complete."). FREE commands are generated by a Forwarding Manager; see Lay at [0072] ("FM 120 will then issue a FREE command over the ATM Bus indicating that the memory occupied by the packet in the PBM Memory is no longer needed and can now be freed for other use.")

Neither the Address Manager nor the Forwarding Manager are components of the ports (i.e., located within the ports), but rather are connected to the ports, as is clearly shown in FIG. 1B and described in Lay at [0051]-[0052] ("Each of the transmit (TX) and receive (RX) portions of ports 102(1)-102(12) are connected to the PBM Bus, ATM Bus, and TXM Bus for communications with other components of the switch. FM 120 is connected to each of the ports 102(1)-102(12) directly

and is also connected to the ATM Bus for communications with other portions of the switch. . . . AM 122 [is] also connected to the ATM Bus for communications with other portions of the switch.")

Accordingly, Lay fails to teach, or even suggest, the limitations of claim 1 wherein a flow control message is generated in the physical layer device and transmitted from the physical layer device to the link layer device. Rather, Lay in fact teaches away from the claimed techniques.

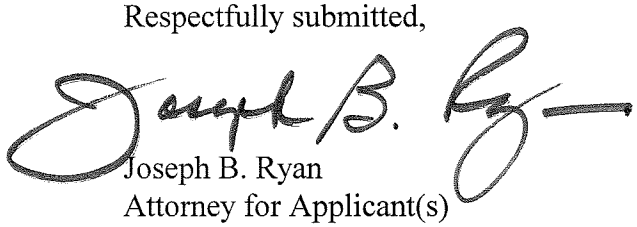
Independent claims 18 and 19 contain limitations similar to independent claim 1 and thus believed to be patentable for at least the reasons identified above in reference to claim 1.

Independent claim 20 contains a limitation of receiving from a physical layer device of the system a flow control message, which the Examiner contends is taught by paragraph [0039] of Lay. As noted above with reference to claim 1, paragraph [0039] of Lay fails to teach or suggest receiving a flow control message from a physical layer device.

Dependent claims 2-17 are believed allowable for at least the reasons identified above with regard to independent claim 1, from which they depend. Moreover, one or more of these claims are believed to define separately patentable subject matter.

In view of the above traversal, Applicants believe that claims 1-20 are in condition for allowance, and respectfully request the withdrawal of the §102(e) and §103(a) rejections.

Respectfully submitted,



Date: January 9, 2008

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